UNDERSTANDINGS AND PERSPECTIVES ON BLENDED LEARNING IN A BRAZILIAN PRIVATE UNIVERSITY IN THE CONTEXT OF TRANSFORMATIONS

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ABSTRACT
The definitions and denominations of blended learning vary considerably. The Covid-19 pandemic has favored a lack of differentiation by indistinctly naming models of emergency remote education through the term blended learning. Hence, the several ways of understanding blended learning are echoed in the diversity of practices that can be adopted. This paper is a snapshot of a masters’ study that aimed at analyzing the understandings and teachers’ practices related to blended learning in a private university in Brazil. During the time of this study, the institution was going through intense internal transformations and an uncertain external context full of unpredictability due to the pandemic situation. This is a case study, and it has a qualitative and exploratory approach. Data was collected from the analysis of institutional documents and semi-structured interviews with instructors from the university. The theoretical framework and literature review uses Bacich, Tanzi Neto and Trevisani (2015); Horn and Staker, (2015); Kanuka and Rourke (2013); Moran (2013); Moreira and Monteiro (2013); Morin (2015); Paniago (2016); and Tori (2009; 2017). The findings were analyzed through a content analysis lens, and showed multiple understandings of the concept of blended learning, relative incomprehension of how to support active learning in various spaces in an integrated manner. In these instructors’ practices and beliefs, the ICT are primarily used to provide a more personalized pace of study with some element of students’ organization concerning time and space. The pandemic was contextualized as a driving factor for the expansion of blended courses, but it does not follow in the same proportion an approach to valorization and development of the faculty.

KEYWORDS
Blended Learning, Distance Education, Digital Technologies

1. INTRODUCTION

Literature on blended learning highlights the diversity of concepts that involve the theme of polysemy and ambiguities (Friesen, 2012; Kanuka & Rourke, 2013). The Covid-19 pandemic complicates these understandings by suddenly expanding the use of information and communication technologies (ICT) in educational practices (Moreira and Schlemmer, 2020; Hodges et al., 2020). In the face of new routines, blended learning takes on a polysemic meaning. Appenzeller et al. (2020) emphasize the need to understand that there is a difference between the emergency strategy adopted for the continuity of classes, called emergency remote learning and blended learning. Moreira and Schlemmer (2020, p. 9) define emergency remote learning as a temporary teaching model that “involves the use of totally remote teaching solutions identical to the practices of physical environments”. For these authors, in this emergency, a classroom as an ecosystem is not constituted or robust. The goal of emergency online education is to provide temporary and quick access during the emergency period.

In Brazilian Higher Education, this context is still experiencing the exponential expansion of Distance Education programs, which in the last ten years (2009-2019) had an increase of 378.9% in the number of students starting their undergraduate courses in such modality (INEP, 2020). Also, a 145.24% growth in the number of blended courses offered between 2017-2018 (Censo EAD.BR, 2018).

Recently, through law No. 2,117 of December 6, 2019, the Ministry of Education (MEC) expanded the authorization for Higher Education Institutions to introduce more distance learning modality credits in the pedagogical and curricular organization of their on-site undergraduate courses. That alone could increase the
total course load of each course by 20% to 40% (MEC, 2019). This flexibility of the workload though, allows for different combinations between online and classroom teaching, enabling new configurations of Brazilian Higher Education. It also provides opportunities for institutions to offer undergraduate programs through blended learning education.

That said, this study aims at analyzing the understandings and teaching practices related to blended teaching in an in-person Biological Sciences undergraduate teaching program. This program is offered at a private university in the State of Mato Grosso do Sul, Brazil. The study investigates the difficulties in understanding blended learning given the diversity of concepts, nomenclatures, and ambiguities that became more complex due to the current pandemic scenario. Based on these findings, the research investigates how this will affect the use of ICT in blended pedagogical practices. In addition, this article intends to contribute to the theoretical foundation that informs the understandings of the features of blended learning and to reflect on pedagogical practices.

2. BLENDED LEARNING

2.1 History and Literature Review

The term blended learning – used throughout this paper - emerged in the US around the 2000s. Initially, it focused on corporate education (Friesen, 2012; Moreira & Schlemmer, 2020). While English-speaking countries use the nomenclature b-learning, blended learning is still predominant. In Brazil, the term was translated as hybrid teaching (Moran, 2021; Martins, 2016). Some of the terminologies adopted are bimodal system (Moran, 2013), blended learning (Moran, 2013), blended learning (Tori, 2009); b-learning (Moreira & Monteiro, 2013); blended (e)learning (Moreira & Monteiro, 2013); multimodality (Schlemmer & Moreira, 2020).

Between 2006 and 2007, after the publications by Curtis Bonk and Charles Graham in the US and Randy Garrison and Norman Vaughan in Canada, there has been a change in the use of the term, sparking interest in blended learning in Higher Education, rather than in the corporate training sector (Friesen, 2012).

More recently, in the period 2011-2013, understandings about blended learning were added in the research studies by Clayton Christensen, Michel Horn and Heather Staker. The publications discuss innovation theories, propose a concept and a taxonomy for blended learning.

In Brazil, blended learning starts as mixed presence and expands into Higher Education, based on the possibility of offering up to 40% of the credit hours in the distance learning modality in some of the different undergraduate programs (Moran, 2021).

Valente (2014) argues that the plurality of nomenclatures characterizes a transitional phase in which several activities and distance education models coexist. The author highlights that blended learning enables pedagogical practices in which the student develops an active role to signify and understand the information. The conceptual discussion is also addressed by Moreira and Monteiro (2013, p. 86) who argue that blended learning “can be understood as a highly complex communication process”, pointing out that the result of the implementation of blended education programs can have effects varying accordingly to the configuration adopted.

Machado (2018) understands blended learning as a methodological approach that integrates ICT to personalize teaching and promote active learning; the author separates and distinguishes the concepts “mixed presence” and “blended learning” by stating that, while in the mixed presence there is a separation between online and face-to-face activities, in blended learning there is integration and connection between the different spaces. Martins (2018) states that the different meanings attributed to blended learning vary according to the use that the institution/author/course intends to demonstrate. The author also states that there is no conceptual consensus shared by authors who research this topic.

The main result of the literature review indicates that, even though blended learning in Higher Education is associated with the combination of the in-person and distance education modalities, the concept is evolving towards the understanding of a more sophisticated, broad, and complex concept. The studies come closer to the understanding that blended learning, from the perspective of the mere combination of modalities, is reductionist and does not contemplate the possibilities of an approach that presupposes personalized teaching,

2.2 Theoretical Framework

Based on Kenski (2012), Moreira and Schlemmer (2020), we can see that ICT use can happen through different methodological approaches. These approaches vary from more instructional ones which focus on the unidirectional transmission of information to more interactive approaches in which the teaching and learning processes occur amidst a multidirectional communication. Following this lens, the goal is not centered on the content, nor on the instruction/instructor, but it is on the dialogical relationship among all individuals. Vaughan (2016) stresses that blended learning is a teaching methodology in which students and instructors share responsibilities and move from passive to more active learning. Following this methodology, individuals learn how to learn and take on more responsibility for their learning in an active learning environment both in in-person and online settings.

Research conducted by Horn and Staker (2015) define blended learning as an education program linked to an educational institution. In this approach, part of the teaching and learning process takes place through an integrated experience with online learning and personalized teaching is articulated with competence-based learning to provide student-centered learning.

Following this perspective, blended learning has some key elements: **Autonomy:** students’ autonomy is related to learning how to manage their own learning, a learn how to learn process (Pires, 2015; Vaughan, 2016). **Personalization:** the development of autonomy happens gradually, and it requires cooperation and monitoring from the instructor. Moreover, it suggests either personal support or more personalized study plans (Bacich, Tanzi Neto & Trevisani, 2015; Schneider, 2015). **Flexibility:** blended programs entail more flexibility in their course projects in terms of thinking of goals, strategies, and methods (Tori, 2017). **The ICT:** the technologies contribute to the personalization of learning and offer a variety of resources to the students (text, videos, animations, audios, etc). Technologies also provide a more personalized rhythm of study. The systems and platforms used can also afford data that shows the students’ development; through continuing evaluation processes, the instructor can plan and replan classes based on the identified data in addition to the individual and collective needs of their students (Horn & Staker, 2015; Lima & Moura, 2015; Rodrigues, 2015).

3. METHODOLOGY

A case study is, according to Yin (2015, p. 17), an empirical investigation that “deeply examines a contemporary phenomenon (‘the case’) in its context of the real world […].” The contemporary educational phenomenon that justifies this case is blended learning in a private higher education institution. This institution expands the percentage of distance education workload of distance education programs, reconfigure different courses pedagogical projects, and implement new platforms such as LMS (Learning Management System), mostly during the Covid-19 pandemic. This research, therefore, aims at understanding contemporary events rather than controlling them. We investigate such phenomenon of blended learning in its context of real-world
(Yin, 2015); are interested in the perspectives of the participants (Minayo, 1994); and intend to contribute to the understanding of educational phenomena from a qualitative lens (Creswell, 2010; André, 2013).

The higher education institution used in this research is private, and it has high-quality evaluation done by the Brazilian Ministry of Education. The university offers 53 undergraduate courses (32 in-person courses, and 21 in distance education) in the different areas of education, health, social sciences, agriculture, engineering, and humanities. The campus infrastructure includes a veterinarian hospital, clinic, gymnasium, a farm-house school, and labs (e.g., communication, technology, and health). The institution has other 27 branches across the Brazilian country that physically support distance education. It also has post-undergraduate programs both in-person (32 different courses) and distance education (46 other courses), in addition to 6 graduate programs (master’s and doctorate), including an international master’s program.

The course explored here – Biological Sciences – is one that prepares future students to teach. It is an in-person course that has a total of 4,080 credit hours. Around 29.71% of these credit hours are offered through an online approach. This course has its core curriculum in 22 other disciplines, and they are all offered in-person, too. Besides, the other 18 disciplines of the course are offered in the distance education model, and 13 are offered in a blended format. The students in this course take disciplines in the field of the Biological Sciences and also in Education (e.g., sociology of education). The latter usually serves other teaching areas as well. The participants in this study were intentionally selected, after all the list of faculty members was carefully considered. Our goal was to recruit participants who were “well informed” (Yin, 2015, p. 117) and able to provide relevant insights about the research goals. In total, there were 5 instructors, and one of them also exercises the role of coordinator in the program. They all have experiences with courses and disciplines that combine both in-person and online teaching. They have worked at the university for over 3 years, are between 33 and 61 years old, and have extensive experience teaching in Higher Education – 5-26 years. Three participants have got their master’s (n=60%), and 2 are PhDs (n=40%).

The intentional recruitment of participants tried to contemplate the multiple experiences in a transdisciplinary exercise (Morin, 2015), which means bringing instructors from different areas of knowledge (pedagogy, letters, biology, biomedicine, immunology).

Data collection happened from March to April of 2021. The collected data comes from institutional documents such as the Institutional Development Plan, the Institutional Pedagogical Project, and the Course Pedagogical Project, and from information gathered in semi-structured interviews which happened via Google Meet. According to Minayo (2008), the methods used in a qualitative inquiry allow mediation between the theoretical and methodological aspects and its empirical reality. Yin (2015) stresses that interviews are sources of the most important information for this type of study.

Data analysis happened from May to June of 2021. The meaning-making processes (Creswell, 2020; André, 2013) included the elaboration of two facets of analysis that emerged in the study. The limitations of this study relate mostly to the health crisis as the study took place during the rapid advancement of Covid-19 outbreaks in Brazil (FIOCRÚZ, 2021) and in the state of Mato Grosso do Sul (SES MS, 2021). Indeed, these factors impacted the participation and availability of more participants.

4. FINDINGS AND DISCUSSION

The ethics committee of research with human beings approved this research. This paper kept all personal information anonymous and did not provide the name of the participating university nor the participants’ names. The letter “P” followed by non-sequential numbers identifies the participants.

4.1 The Instructors’ Concepts

Understandings. The results showed multiple understandings when the instructors were asked about their concepts of blended learning. Predominantly, participants understood blended learning as a combination of the in-person and distance education modalities. Some responders mentioned they had just heard about or had contact with the terminology, and that makes it harder for them to adopt and work with blended learning in classroom. Sometimes, more than one participant indistinctly associated blended learning to emergency online learning.
P86: “For me, blended learning is considered as a teaching methodology, which will combine both in-person and distance learning, but blended learning will also offer you a flexibility in both these environments, virtual and in-person […] So, blended learning for me, it enables us to overcome this view that the whole class is doing the same thing at the same time”.

P39: “From what I understand, it is that in some courses, some determined field studies will be applied in-person, including those with practicum, or a more theory-practice approach […]. And those disciplines or courses that are more basic and general for everyone, and that could be used by more than one course, those will move onto the virtual, onto distance education. These last ones will be developed online”.

P12: “Because today, we have a lot of difficulties in understanding what blended learning is, and how it should be worked with. If you see the information we have, you will see that it exists… we will have bigger… we will have the most diverse number of definitions of blended learning”.

P70: “For me, blended learning is that one that goes… that has an in-person meeting with students, then partially it is in-person and partially remote, which happens with the help of different platforms […]”.

Discussion: As it could be observed in the blended learning literature, the flexibility of having multiple possibilities and models associated to the selection of different conceptions about blended learning can result in contradictory implications. On one hand, the different conceptions promote the popularity and expansion of blended learning. On the other hand, however, these views make it complex to understand what blended learning actually is and its implications after implementing and performing it (Graham, 2006; Friesen, 2012; Kanuka & Rourke, 2013). Along with Horn and Staker’s (2015) stance, there is a need for “broader” (p. 37) parameters which will not limit the possibilities that blended learning fosters. However, Graham (2006), Hanuka and Rourke (2013), and Horn and Staker (2015) also recognize that broad definitions can generate more misunderstandings around blended learning, making it more complex even to use it in practice. Graham (2006) then proposes the need for a more restricted definition that reflects the core characteristics of blended teaching. Minayo (1994), for instance, say that concepts have a communicative feature and that itself should allow interlocutors to understand them.

Andrade (2018) contributes to the empirical results that were highlighted by some instructors who mentioned about pedagogical practices. Paniago (2016) says that instructors have been challenged to teach beyond the context of a classroom, and have been asked to use different media, audiovisual, and technological resources within the reconfiguration of spaces and practices of blended learning.

Perspectives. For the participants, the pandemic will favor the introduction of some of the distance education credits in in-person courses. This means that part of the adopted methodologies of teaching in a blended format should be more permanent in a post-pandemic moment. Teachers mention that the expansion is more related to financial and cost pressures than efforts to improve educational practices. They also mention that this expansion causes impacts related to remuneration and teaching work.

P52: “It is because I have been doing an analysis, I have noticed that several employers, after this period of time, can also do an analysis and notice that institutions will profit more from keeping the employee at home. That can start adopting that, not only in education, but other areas too […] So I think a lot of it will remain”. In reference to the choice of blended learning the teacher states: “It seems to me to be a decision based… on the economic part of the university prevailing over the pedagogical part”.

P12: “So, I believe that at this moment, we could be going through a transition […]. But I believe that a 100% in-person teaching will not happen again”.

Discussion: Moran (2012, p. 129) states that the option of expanding blended learning is related to the digital culture that our society is in today, along with strategies of institutions to decrease their costs.

4.2 Digital Technologies

Technology. The virtual learning environment (VLE) was the type of technology mentioned by all participants in the study. The VLE has been the main resource used to combine both in-person and online learning. Its use has been reflected under two aspects: to provide access to content and to allow students to personalize their own time and space.

P39: “[…] the material and the content are there and the student will work on them whenever they think it is better. They will schedule their own time”.

P12: “Part of the course is offered through distance learning anyways. Students access a virtual environment, do the readings and the activities, do an assignment according to the orientation of the learning
unit, and at the same time, they contact the professor of the course who attends the student and supervise them in an in-person approach”.

**Integration.** For basically all instructors who responded the questions for this study, it is challenging to integrate educational practices in both in-person and online settings at the same time.

**P52:** “We have to make the discipline move as integrated as possible. They [students] enter the platform, they do the activities. And I look there, in addition to having to set up the activities, I bring some of the discussions to my room, just to make it look more unison”.

**P70:** “Because I bring content from the platform to discuss it during the class: ‘ah in that exercise, in that problem with the platform that you solved, you said that, why did you say that?’. So, I try to bring this to the class [in person]”.

**P12:** “And we need to, we would need to make this link so that the student understands that distance education content is not separate, or that it is loose, free, and with no one taking care of it there. [...] But there has to be a connection so that the student doesn’t get lost. Because otherwise they will reach the end of the course and will say: I took two courses, one in-person and another in distance education”.

**Discussion:** For Moran (2003, p. 59), the pedagogical project of a given course should integrate the in-person and the digital as “curricular components that are inseparable”. That is, to sustain that both virtual and physical spaces should be equally important to maximize the possibilities of more flexible, collaborative, and personalized teaching and learning processes.

**Autonomy.** Methodologies such as blended learning, where the learning strategies are centered on the effective participation of students, contribute to a better engagement, autonomy, and participation of the students in the teaching and learning processes (Horn & Staker, 2015; Bacich, Tanzi Neto & Trevizani, 2015). However, most participants did not mention the use of ICT and blended learning as an opportunity to develop an autonomous and active learning. Some participants did understand that an autonomous and active learning is conditional to a successful blended syllabus, but not one that should be developed and improved during the whole course.

**P39:** “You can clearly notice that those who are not committed cannot sustain themselves. They do not thrive. They end up staying and soon enough dropping off”.

**P52:** “I think that the distance education system generally requires the students to be mature, so they can be autonomous. And most of the younger students do not have that”.

## 5. CONCLUSION

This study aims at analyzing the understandings and teaching practices related to blended learning during pandemic outbreaks. Our discussions highlighted challenges towards the complexity and diversity of conceptualizing blended learning, observed in the different teaching practices of participants. Furthermore, the study showed the relative misunderstandings around integrated practices in both in-person and online settings. The relevance of this discussion has acquired such a dimension that currently the National Council of Education has announced the proposal for an Ordinance that will bring concepts to broaden the understanding of blended learning in Brazil. Most of our participants affirmed that the pandemic would contribute to the expansion of blended courses with impacts on teacher development and work. However, only a few participants suggested that such expansion will increase the possibilities of students’ autonomy development through blended learning. And the ICT have been used for content access and offered students flexibility in their re-signification of time and space.

**ACKNOWLEDGEMENT**

This research study has had the support of CAPES (https://www.gov.br/capes/pt-br), a foundation linked to the Ministry of Education, which funds master’s programs in Brazil.
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